



L. Atlas Minerals Mill
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Docket File 40-3453

JUL 25 1978

FCPF:PJG
40-3453
SUA-917, Amendment No. 6

NMSS:R/F
FCPF:R/F
IE-HQ (2)
PDR
SHO
JDLomax
RAScarano
PJGarcia
JJLinehan
LCRouse
JBMartin
JCatania
ACabell
BBrooks
JPartlow
SDuncan
DWeiss

JGreeves
TJohnson

Atlas Minerals
ATTN: Richard A. Adrian
General Superintendent
P. O. Box 1207
Moab, Utah 84532

Gentlemen:

Pursuant to Title 10, Code of Federal Regulations, Part 40, Source Material License SUA-917 is hereby amended to authorize modification of the existing tailings retention system by construction of an interior embankment in accordance with the statements, representations, and conditions specified in the licensee's application and enclosure of July 11, 1978. In addition, Source Material License SUA-917 is hereby amended to add the following conditions:

1. The licensee shall reclaim the Atlas Mill tailings impoundment area in accordance with Section 3.2.5 of the "Draft Environmental Statement Related to Operation of Moab Uranium Mill" (NUREG-0341), dated November 1977.
2. The licensee shall decommission the Atlas Mill site in accordance with Section 3.2.6 of the "Draft Environmental Statement Related to Operation of Moab Uranium Mill" (NUREG-0341), dated November 1977, and Annex C, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," dated November 1976 (enclosed).
3. The licensee shall initiate surety arrangements for the reclamation and decommissioning program with the state of Utah, Department of Natural Resources, by September 30, 1978.

ACT 1019/003

OFFICE➤						
SURNAME➤						
DATE➤						

All other conditions of this license shall remain the same.

Conditions 1 through 3 above were discussed with your Mr. Adrian during a telephone conversation with Mr. Ross A. Scarano on July 25, 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

Leland C. Rouse

Leland C. Rouse, Chief

Fuel Processing & Fabrication Branch

Division of Fuel Cycle and

Material Safety

Enclosure:

Annex C

*Concurrence by John Thomas-WR2
on 7-27-78
P. Garcia*

OFFICE ➤	FCPF	FCPF	FCPF	FCPF		
SURNAME ➤	PJGarcia:mb	FDLomax	RAScarano	LCRouse		
DATE ➤	7/1/78	7/1/78	7/25/78	7/25/78		

ANNEX C

GUIDELINES FOR DECONTAMINATION OF FACILITIES AND EQUIPMENT

PRIOR TO RELEASE FOR UNRESTRICTED USE

OR TERMINATION OF LICENSES FOR BYPRODUCT, SOURCE,

OR SPECIAL NUCLEAR MATERIAL

U. S. Nuclear Regulatory Commission
Division of Fuel Cycle and
Material Safety
Washington, D.C. 20555

NOVEMBER 1976

The instructions in this guide in conjunction with Table I specify the radioactivity and radiation exposure rate limits which should be used in accomplishing the decontamination and survey of surfaces or premises and equipment prior to abandonment or release for unrestricted use. The limits in Table I do not apply to premises, equipment, or scrap containing induced radioactivity for which the radiological considerations pertinent to their use may be different. The release of such facilities or items from regulatory control will be considered on a case-by-case basis.

1. The licensee shall make a reasonable effort to eliminate residual contamination.
2. Radioactivity on equipment or surfaces shall not be covered by paint, plating, or other covering material unless contamination levels, as determined by a survey and documented, are below the limits specified in Table I prior to applying the covering. A reasonable effort must be made to minimize the contamination prior to use of any covering.
3. The radioactivity on the interior surfaces of pipes, drain lines, or ductwork shall be determined by making measurements at all traps, and other appropriate access points, provided that contamination at these locations is likely to be representative of contamination on the interior of the pipes, drain lines, or ductwork. Surfaces of premises, equipment, or scrap which are likely to be contaminated but are of such size, construction, or location as to make the surface inaccessible for purposes of measurement shall be presumed to be contaminated in excess of the limits.
4. Upon request, the Commission may authorize a licensee to relinquish possession or control of premises, equipment, or scrap having surfaces contaminated with materials in excess of the limits specified. This may include, but would not be limited to, special circumstances such as razing of buildings, transfer of premises to another organization continuing work with radioactive materials, or conversion of facilities to a long-term storage or standby status. Such requests must:
 - a. Provide detailed, specific information describing the premises, equipment or scrap, radioactive contaminants, and the nature, extent, and degree of residual surface contamination.
 - b. Provide a detailed health and safety analysis which reflects that the residual amounts of materials on surface areas, together with other considerations such as prospective use of the premises, equipment or scrap, are unlikely to result in an unreasonable risk to the health and safety of the public.

5. Prior to release of premises for unrestricted use, the licensee shall make a comprehensive radiation survey which establishes that contamination is within the limits specified in Table I. A copy of the survey report shall be filed with the Division of Fuel Cycle and Material Safety, USNRC, Washington, D.C. 20555, and also the Director of the Regional Office of the Office of Inspection and Enforcement, USNRC, having jurisdiction. The report should be filed at least 30 days prior to the planned date of abandonment. The survey report shall:

- a. Identify the premises.
- b. Show that reasonable effort has been made to eliminate residual contamination.
- c. Describe the scope of the survey and general procedures followed.
- d. State the findings of the survey in units specified in the instruction.

Following review of the report, the NRC will consider visiting the facilities to confirm the survey.

TABLE I

ACCEPTABLE SURFACE CONTAMINATION LEVELS

NUCLIDES ^a	AVERAGE ^{b c f}	MAXIMUM ^{b d f}	REMOVABLE ^{b e f}
U-nat, U-235, U-238, and associated decay products	5,000 dpm α /100 cm ²	15,000 dpm α /100 cm ²	1,000 dpm α /100 cm ²
Transuranics, Ra-226, Ra-228, I-230, Th-228, Pa-231, Ac-227, I-125, I-129	100 dpm/100 cm ²	300 dpm/100 cm ²	20 dpm/100 cm ²
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	1,000 dpm/100 cm ²	3,000 dpm/100 cm ²	200 dpm/100 cm ²
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except SR-90 and others noted above.	5,000 dpm $\beta\gamma$ /100 cm ²	15,000 dpm $\beta\gamma$ /100 cm ²	1,000 dpm $\beta\gamma$ /100 cm ²

^aWhere surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides should apply independently.

^bAs used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

^cMeasurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each such object.

^dThe maximum contamination level applies to an area of not more than 100 cm².

TABLE I

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^eThe amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped. .

^fThe average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters should not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milliams per square centimeter of total absorber.